DEC STD 074-0 Printer Systems Standard - Introduction

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ABSTRACT: This section of DEC STD 074 contains an introduction to DEC STD 074 and the Printer Systems Reference Manual (PSRM), a collection of Digital standards relating to the development of printers and printer related products, including translators, printer emulators, and printer software. It describes the audience for the PSRM and those responsible for its development and maintenance. Also included as part of this document set are sections of DEC STD 070 Video Systems Reference Manual.

APPLICABILITY: This standard is mandatory for Engineers designing hardware for terminal products and Software Engineers designing programs using terminal interfaces. The material contained within this document defines mandatory standards, unless the material is clearly marked as either (a) not mandatory or (b) guidelines. Material marked as "not" mandatory shall be of potential benefit to Digital and must be followed unless there are specific reasons for noncompliance. "Guidelines" define recommended approaches and techniques that are considered to be good practice, but should not be considered requirements.

STATUS: APPROVED 16-Jul-1990; use VTX SMC for current status.

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1 INTRODUCTION

Digital Equipment Corporation has traditionally been a pioneer in developing and implementing standards for terminal service interfaces. The LA120 and LA34 were Digital's first hardcopy terminals based on *ANSI X3.64-1979 Additional Control Functions for use with ASCII*. Many of Digital's printer and display terminals have since implemented ANSI and Digital-private control functions, and Digital has been an active participant in the development of new control functions.

Digital has already built a number of hardcopy terminal devices based on these interfaces, and is committed to supporting these interfaces in future terminal products to ensure software compatibility for operating systems as well as application programs.

Video terminals and workstations may implement hardcopy terminal emulators to provide a preview of hardcopy documents, and can use the large body of software that already exists for these devices.

The Printer Systems Reference Manual (PSRM) documents the interfaces to Digital hardcopy terminal devices. It is intended to serve as both an implementation specification for product developers and as a guide to programmers attempting to produce software that will be transportable across a wide range of devices. *DEC STD 074 Printer Systems Standard* describes those interfaces applicable only to hardcopy terminal devices. Other standards applicable to the development of hardcopy terminals are also included in the PSRM.

The standards included in the PSRM define interfaces in a manner independent of the physical characteristics of a particular device implementation. Enough flexibility is allowed in the interface description to permit the production of a wide variety of printer products, while ensuring that software can be designed to intelligently make use of the full range of features in a given product and across a family of products.

As new functionality is developed for hardcopy terminals, it will be added to the PSRM before final implementation. An architectural certification process provides a means of measuring product performance against the PSRM, and ensures software compatibility across products.

Products presented as conforming to the architectural specifications contained in the PSRM must be submitted for certification testing and must be evaluated against the requirements of these standards.

2 AUDIENCE

There are at least two intended audiences for the PSRM. One audience is the engineers who will actually design the hardcopy terminal devices or emulators. It is important that these designers have a thorough knowledge of the functionality required at the device interface in order to build devices at a competitive cost that will be compatible with existing software products. Where appropriate, the PSRM provides a detailed description of the logic and mechanisms required to implement these interfaces, with the goal of preventing changes that would cause the interfaces to change over time.

The second audience for the PSRM is the software engineers who will design programs that use hardcopy terminal devices and emulators to produce documents. The PSRM provides these engineers with a convenient source of information for Digital's family of hardcopy terminal products, including discrepancies between implementations, enabling the engineer to produce device-independent software.

3 RESPONSIBILITY

Development and maintenance of the PSRM is the responsibility of VIPS (Video, Image and Printer Systems) Group Hardcopy Engineering. Distribution and control of the document is through Standards and Methods Control (SMC).

Further responsibilities, conformance criteria, and general architectural concepts and procedures are described in *DEC STD 074-1 Printer Systems Standard - Concepts and Conformance Criteria (in process)*. General Terminology used throughout the PSRM is defined in *DEC STD 074-2 Printer Systems Standard - Terminology*.

4 TABLE OF CONTENTS

Each standard included in the PSRM manual provides a detailed Table of Contents.

APPENDIX A REFERENCED DOCUMENTS

A.1 EL-Class Digital Documents

EL-Class Number	Document Title
EL-00074-02	*DEC STD 074-2 Printer Systems Standard - Terminology*

Use VTX SMC to order copies of EL-class documents from Standards and Methods Control. Send distribution questions to JOKUR::SMC or call DTN: 234-4423.

A.2 Other Digital Documents

Document Number	Document Title
ADSEL00074010000	*Printer Systems Standard - Concepts and Conformance Criteria (In Process)*

A.3 Other Documents

Document Number	Document Title
ANSI X3.64-1979	*Additional Control Functions for use with ASCII*

A.4 Ordering Information

Following is the source ANSI documents.

- American National Standards Institute (ANSI),
  1430 Broadway, New York, NY 10018,
  Telephone (212) 354-3300 x479

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